

# Environmental Health at School:

## Ignored Too Long



**Panel and Facilitated Workshop**

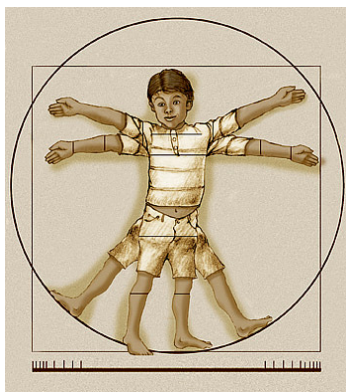
**November 2015**

**Summary Report**

Sponsored by:



**HEALTHY SCHOOLS NETWORK**



# ENVIRONMENTAL HEALTH AT SCHOOL: IGNORED TOO LONG

Hosted by: Healthy Schools Network



## W.K. Kellogg Foundation

The Healthy Schools Network's event is supported by the W.K. Kellogg Foundation (WKKF). WKKF supports children, families and communities as they strengthen and create conditions that propel vulnerable children to achieve success as individuals and as contributors to the larger community and society.



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## National Institute of Environmental Health Sciences

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National Institute of  
Environmental Health Sciences

## Education Facilities Clearinghouse

The Education Facilities Clearinghouse (EFC) provides a website of best practices and provides technical assistance and training to schools and school divisions - from Pre-K to higher education - on a range of facility topics. The EFC is a program of the George Washington University and the Graduate School of Education and Human Development and is funded by the U.S. Department of Education.



## The California Endowment

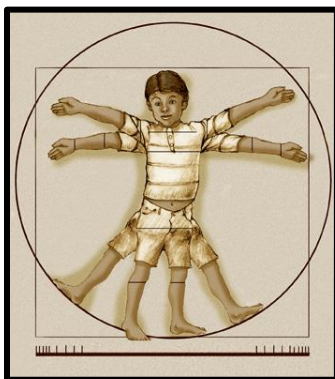
The California Endowment, a private, statewide health foundation, was established in 1996 to expand access to affordable, quality health care for underserved individuals and communities, and to promote fundamental improvements in the health status of all Californians. Headquartered in downtown Los Angeles, The Endowment has regional offices in Sacramento, Oakland, Fresno and San Diego, with program staff working throughout the state. The Endowment challenges the conventional wisdom that medical settings and individual choices are solely responsible for people's health. The Endowment believes that health happens in neighborhoods, schools, and with prevention. For more information, visit The Endowment's Web site at [www.calendow.org](http://www.calendow.org)



## Mid-Atlantic Center for Children's Health and the Environment

The Mid-Atlantic Center for Children's Health & the Environment, a Pediatric Environmental Health Specialty Unit is funded under the cooperative agreement award number 1U61TS000237-01 with the American Academy of Pediatrics and the Agency for Toxic Substances and Disease Registry (ATSDR). Acknowledgement: The U.S. Environmental Protection Agency (EPA) supports the PEHSU by providing funds to ATSDR under Inter-Agency Agreement number DW-75-92301301. Neither EPA nor ATSDR endorse the purchase of any products or services mentioned in PEHSU materials.





Healthy Schools Network is deeply grateful to all members of the workshop Organizing Committee for their advice and assistance in designing the agenda for "Environmental Health at School: Ignored Too Long" through five facilitated conference calls and through other insightful contributions.

### **Organizing Committee**

Claire Barnett, MBA, *Healthy Schools Network*  
Jerome Paulson, MD, FAAP, *Professor Emeritus, George Washington University*  
G. Victor Hellman, Jr., Ed.D., *Education Facilities Clearinghouse*  
Donna Mazyck, MS, RN, NCSN, *National Association of School Nurses*  
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Laura Anderko, PhD, RN, *Georgetown University, Mid-Atlantic Center for Children's Health and the Environment*  
Chip Halverson, ND, *Co-Founder National Education Association Healthy Schools Caucus*  
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Ruth Etzel, MD, PhD, *US Environmental Protection Agency, Office of Children's Health Protection*  
(Designee: Khesha Reed)  
David Rowson, *US Environmental Protection Agency, Indoor Environments Division*  
(Designees: Brenda Doroski & Michelle Curreri)  
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Kim Gray, *National Institute of Environmental Health Sciences*

### **Facilitators**

Dana Goodson, *RESOLVE*  
Kim Rustem, *RESOLVE*

# Environmental Health at School: Ignored Too Long

Panel and Facilitated Workshop  
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## Summary Report

### Introduction

On November 9-11, 2015, Healthy Schools Network, with funding support from the W.K. Kellogg Foundation, Education Facilities Clearinghouse, The California Endowment, Mid-Atlantic Center for Children's Health and the Environment, and National Institute of Environmental Health Sciences, convened the first national facilitated workshop on environmental health in schools and child care facilities at The PEW Charitable Trusts in Washington, DC.

This meeting brought together representatives from local and state health departments, public health associations, federal agencies (the US Environmental Protection Agency (EPA), Centers for Disease Control and Prevention National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (CDC -NCEH/ATSDR), and the National Institute of Occupational Safety and Health (NIOSH)), environmental and health NGOs, environmental justice organizations, school facilities experts, and parents of affected children to develop research and policy recommendations for addressing environmental health hazards (including, but not limited to, indoor air pollution, PCBs, molds, and chemical mismanagement and spills) commonly found in the nation's 130,000 PK-12 schools and child care facilities. These risks place more than 55 million children who occupy these facilities across the country at risk every day.



*Panelists with organizers of the November 2015 panel and facilitated workshop.*

*Left to right: Speaker Ruth Etzel, MD; Organizer/Speaker Jerome Paulson, MD; Organizer Claire Barnett; Speaker Suzanne Condon, MSM; Organizer Laura Anderko, PhD; Speaker Bill Fisk, MS. Missing from photo: Speaker John Howard, MD*

### *Workshop Summary Report Scope*

Outlined in the following sections of this summary report are the main themes derived from conversations during the facilitated workshop, as well as policy and research recommendations that participants indicated should be explored further. This summary provides background to and an outline of potential policy and research priorities to be refined at a national meeting of stakeholders hosted by the Healthy Schools Network, proposed for late spring of 2016.

As the first national discussion on children's environmental health in schools, the workshop was not facilitated to full consensus. However, some broad areas of consensus emerged from the common statements and experiences of many attendees, which led to recommendations for new policies and research in children's environmental health listed in the final section of this summary. Support for these recommendations should not be attributed to any specific person in attendance or the organization they represent.

Overall, participants could agree that children's risks and exposures at schools and in child care facilities are truly public health issues that require public health solutions. This approach will require the involvement of professionals across agencies and NGOs to develop preventive measures and identify a host of primary, secondary, and tertiary prevention actions that keep children safe.

**The list of panel and workshop participants is found in Appendix 1 to this report.**

**Speaker Presentations and the Full Report (60pp) of the panel and workshop proceedings, and bibliography are found here: <http://healthyschools.org/clearinghouse.html>**



*Representatives of 32 organizations participated in the Panel and Workshop, November 2015.*



### *The Environmental Health Problem*

All children should be considered at risk for learning and health problems due to the unexamined and unaddressed environmental health hazards in their schools and the lack of public health services for children at risk or with suspected exposures at school.<sup>1</sup> Ideally, child care centers and PK-12 schools would be distraction-free zones providing safe, healthy, nurturing, and academically challenging environments for all children, and safe, healthy, and supportive environments for all employees. But repeated studies have shown these facilities fall far short, and are in fact harming the health, safety, and learning of their occupants.



*A School damaged by flooding after Hurricane Katrina.*

Children are uniquely vulnerable to environmental health hazards, such as those commonly found in this nation's 130,000 PK-12 schools (PK-12) and child care facilities, the places where over 55M children spend the most time when not at home. These hazards (including, but not limited to, indoor air pollution, PCBs, molds, chemical mismanagement and spills, etc.<sup>2</sup>) can adversely affect all children's ability to learn as well as their short-term and long-term health. Personnel, who are outnumbered by children by about 10-1 in PK-12 schools, can access an array of public and private occupational health supports, such as worker health and safety training, workplace inspections, bargaining contracts, and occupational health clinics, but none of these protections are designed for use by children.

In light of the benefits of a physically healthy learning environment, and given that all states compel children to attend school, and that increasing numbers of children are in early child care, the lack of coordinated policy and research approaches regarding children's risks and suspected exposures in these settings has profound economic, justice, equity, and ethical implications that have not adequately been addressed and that impact children's health and ability to learn every day.<sup>3</sup>

While the U.S. Constitution leaves the responsibility of PK-12 education to the states, health and environmental responsibilities are shared federal-state-local issues and important questions, such as "how should we identify, prevent, and track risks and children's suspected exposures?" and "how can we benchmark prevention efforts?" must be considered collaboratively.

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<sup>1</sup> Paulson, THS 2015, US EPA State School EH Guidelines, NACCHO policy

<sup>2</sup> For full text of case reports, see [https://drive.google.com/file/d/0B-jj-Uqv\\_J65ZzBNSjISaWhmam8/view?usp=sharing](https://drive.google.com/file/d/0B-jj-Uqv_J65ZzBNSjISaWhmam8/view?usp=sharing)

<sup>3</sup> Baker L, Bernstein H. The Impact of School Buildings on Student Health and Performance. McGraw-Hill, 2012.

It is understood that the recommendations proposed in this summary report cannot solve all the problems plaguing children inside and outside of schools. Many child care centers and PK-12 schools face many other challenges, as the children they enroll may need a safe haven from violence; physical, psychological, or sexual abuse or bullying at home or in the community; or substance abuse among friends, neighbors, or family members. However, evidence supports the conclusion that child care centers and PK-12 schools that do not protect children's health from environmental hazards can never be true houses of learning and may impose new, avoidable costs on children, their families and teachers, and the health care system. Therefore, the recommendations stemming from this novel workshop are anticipated to have significant impacts on school environments and multiple fields, including children's health, health care, environmental public health, education, environment, indoor environments, and building sciences.



*Reality Check Panel stuns attendees. Advocates/parents discuss the impact of renovating an occupied school (Oklahoma); the misuse of disinfecting products on cafeteria tables (Tennessee); health and justice efforts to prevent building a new school on a toxic site with federal funds (New Orleans).*

### *Justice and Equity Issues*

The poorest children in the poorest communities tend to have the facilities in the worst condition (GAO), and thus suffer the worst exposures. In addition, children with preexisting health and learning impairments may be disproportionately impacted by environmental health problems in school and child care facilities. Moreover, public schools disproportionately enroll children who are poor or who have disabilities.

### *Sources of the Problems*

Throughout the course of this workshop, participants identified several key factors contributing to the persistence of environmental health problems in schools and placing children at significant risk. These factors are described below.

**The U.S. lacks a comprehensive and collaborative federal, state, and local system for dealing with child or parent complaints and protecting children from environmental risks in schools and child care facilities.**

As identified by meeting participants, federal regulatory agencies lack statutory authority to respond to child or parent complaints and intervene in schools to address known environmental health hazards affecting children. For example, the US Department of Labor's Occupational Safety & Health Administration (OSHA), the federal agency responsible for setting and enforcing federal regulations regarding workplace safety for adult workers, does not set standards for children and has no responsibility for children in schools and child care facilities. The National Institute of Occupational Safety and Health (NIOSH), within the Centers for Disease Control and Prevention (CDC), is the federal agency responsible for conducting research and providing onsite health hazard evaluations and guidance to protect employees from environmental health hazards in their workplaces, such as schools; but it lacks the statutory authority to assist children and parents with the same child care- or school-based exposures.

#### **Parent Case Report 1:**

*A NYS parent reports: "My son was healthy in elementary school but when he moved up to the middle school he became ill, and then I found out that school teachers and other children were sick too. I heard there were high levels of radon in the building and carbon monoxide as well which is very dangerous. Why is it that the teachers can get help from (state –funded) occupational health clinics but children, who out-number adults at school, have no help from public agencies? I thought the purpose of schools was to help develop children into healthy, independent adults! Now that he has moved up, he is healthy again, but there are still kids sick at the middle school."*

With limited recourse for parents at the federal level, the problem is further compounded by the fact that in some states and localities, public health agencies either believe they lack the statutory authority and/or lack the capacity to intervene or respond to a child or parent



*School field sprayed with wrong chemicals.*

complaint, if the type of environmental hazard or risk being reported does not fall directly within their purview. Hospitals are also unable to intervene or support a parent complaint in many localities because they have limited or no expertise in children's environmental health and are not provided the appropriate legal authority for access. This disconnected system for dealing with environmental hazards in schools and child care facilities leaves children falling between the cracks of national, state, and local regulatory regimes and leaves them in harm's way.



To improve school and child care facility environmental quality and to encourage collaborations between local, state and federal agencies, the US Environmental Protection Agency (EPA) provides voluntary guidance and has provided limited grants to address hazardous school environments on topics such as indoor air quality (IAQ), integrated pest management (IPM), design, drinking water, and building siting. It has also provided state agencies with guidance for setting up a comprehensive statewide interagency program to address school environments. However, without a comprehensive federal, state, and local regulatory system for dealing with environmental hazards and at-risk children, collaborations and protective policies remain largely voluntary and piecemeal and environmental issues in schools and environmental risks to children persist.



*Inadequate, dirty janitorial closet.*

**An inconsistent landscape of and adherence to effective child-protective policies, prevention programs, and intervention systems across states and localities leave some children vulnerable and at greater risk.**

The federal government has extremely limited authority to regulate environmental health factors of educational facilities that may impact children's health. For example, the US EPA has some authority related to asbestos, lead, drinking water, and PCBs; but a broad general authorization on children's environmental health does not exist at any agency. As a result, protections for children from environmental health risks differ widely state by state and from locality to locality, creating a landscape of disproportionate risks and impacts for children across the U.S.

Some efforts have been made at the federal level and state levels to address this inconsistent landscape of environmental health risks present in schools; however, inconsistent uptake and poor adherence to guidelines and policies still leaves some children within states and localities at greater risk.

EPA has developed voluntary guidelines, recommendations, and programs for schools and state and local governments to address some of the environmental risks in and around schools. These include a voluntary program to reduce the infiltration of fumes and carbon monoxide from idling school buses into classrooms, voluntary siting guidelines for schools, a voluntary school chemical cleanout program, a voluntary program to remove lead from drinking water, recommendations for radon testing, and recommendations for testing and improving indoor air quality. Also at the federal level, the Asbestos Hazard Emergency Response Act (AHERA) requires public school districts and nonprofit schools to inspect buildings for asbestos, develop management plans, and take actions to prevent or reduce asbestos hazards. In addition, more

than thirty states have implemented programs and policies for addressing indoor air quality in schools and integrated pest management (IPM) and a growing number of states and districts have policies regarding the use of green cleaning products or have adopted advanced schools design standards. However, children living in states and districts without these programs and policies, or where those are purely voluntary or not ever enforced, remain at additional risk.

#### **Parent Case Report 2:**

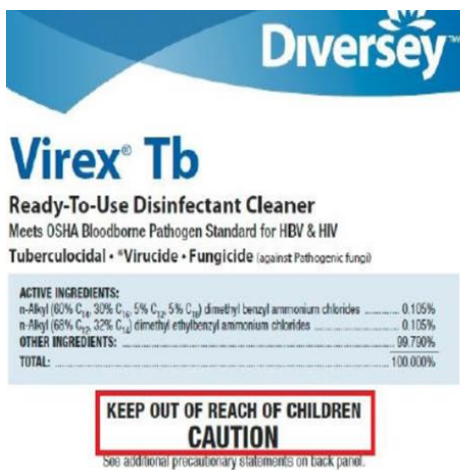
*A Tennessee Parent reports:  
“It took four years of hard work to get my school to stop spraying hospital-grade disinfectants around children at lunch. Worse, children were asked to do the spraying. After documenting and reporting this, I was banned from visiting my child’s school; it took five months for a lawyer to get the ban revoked.”*

Participants also acknowledged that while the above efforts have begun to target improving school facility environmental conditions, few services exist for children at risk or with exposures. This inconsistent landscape of state policies coupled with the evidence that the poorest children are often learning within the worst condition school buildings leaves many children at greater risk than others.

**A culture of “local control” and resistance to state or federal oversight within school districts permits environmental health problems to persist in schools.**

In some places, decision-making authority over schools and the environmental health in schools rests at the local level, which makes it difficult for state health departments to intervene when reluctant school administrators, personnel, superintendents, and schools boards which have dismissed parent and child complaints about existing environmental health hazards.

Several participants identified the challenge of schools forcefully advocating for more state funding while simultaneously seeking to avoid state regulations. Absent any external oversight or formal inspections, children’s health remains dependent on the efforts of local champions, but the inconsistent of their presence in schools makes it difficult to sustain environmental health programs and momentum. In addition, in resistant schools, “local control” without oversight, provides little to no protection for school personnel who might speak out. This leaves personnel and parents at risk of facing serious repercussions for reporting issues. Also, there are no publicly supported



*Hospital-grade disinfectant within reach of elementary students using the cafeteria.*

social and technical resources for parents who have identified environmental risks in their schools.

**Lack of training for school and childcare personnel on environmental risks present in schools and child care facilities prevents personnel from identifying and mitigating these risks.**

Several participants also acknowledged that in their experience, education leaders and other school and child care personnel often lack the knowledge or training to identify environmental health risks to children in schools. They are also often unaware of how to identify the effects of those potential exposures, the benefits of greener and healthier facilities, and the proper corrective actions to take. Without this knowledge or training, even the most caring of school personnel may not have the clout or the authorization to protect children from environmental health risks.

In addition, some personnel may inadvertently respond in ways that only add to existing problems.



*Water damaged, moldy ceiling tiles.*

**Lack of a nationally coordinated research and data collection effort along with federal laws that prevent data sharing impede tracking and evaluation efforts necessary to identify and address environmental risks in child care and school facilities.**

Participants noted that currently no systematic data collection efforts exist on environmental health hazards in child care or PK-12 school buildings, or environmental health risks. The first and last nationally coordinated research and data collection efforts on school buildings were conducted in 1996 and then in 2012. In June 1996, the Government Accountability Office (GAO) released a report, *School Facilities: America's Schools Report Differing Conditions*, presenting the results of a one-time nationwide survey of the facility conditions of nearly 10,000 schools and site visits to 10 school districts.<sup>4</sup> More recent information comes from the self-reported data collected between the years of 2012 and 2013 for the National Center for Education Statistics' report *Condition of America's Public School Facilities*. Similar studies do not even exist for child care facilities. Lack of a systematic, annually occurring, nationally representative data collection effort makes it difficult to track the physical conditions of public school and child care facilities and the presence of environmental health risks. Without this important information, it is very difficult to implement necessary evidence-based interventions, and measure progress to prevent and reduce environmental risks to children in schools.

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<sup>4</sup> U.S. General Accounting Office, "School Facilities: America's Schools Report Differing Conditions" (June 1996), available at <http://www.gao.gov/assets/230/222833.pdf>.

### **Parent Case Report 3:**

*SN is an 8 year old boy who attends a public school in a county of one of the mid-Atlantic states. His mother called the Mid-Atlantic Center for Children's Health and the Environment because of problems with respiratory distress while at school and no problems at home. The mother was able to supply pictures of various sites within the school that appeared to have mold; and she reported numerous anecdotes from other parents and school personnel about health complaints that those individuals associated with exposure to what they believed were mold. The mother was also told by school personnel that although they had concerns about their own health and know of staff members who had left the school, they were unwilling to confront the system with the problem. The child's physician found no problem other than the wheezing and consultation with several pediatric specialists found no other problem. The mother was requesting transfer to another school building and was refused. The Mid-Atlantic Center provided a letter recommending the transfer. The mother was initially rebuffed and then came into possession of a draft letter to her which acknowledged the long-standing mold and moisture problem in the building. The final letter had that information removed. Suddenly, the school reversed course and agreed to transfer the child.*

An additional barrier for tracking and evaluation efforts, is the Family Education Rights and Privacy Act (FERPA), which prevents data-sharing efforts between public schools and public health departments. FERPA is a federal law that protects the privacy of student education records and prohibits schools from disclosing student records to other non-exempt parties without parental consent. Student records often include important health information that could be used by public health departments to begin tracking and evaluating the impact of environmental health risks on student health,

as well as evaluating the success of interventions. However, public health departments are not considered exempt parties and so do not have legal access to this data.



## *Recommendations*

Key recommendations developed by participants during the meeting are described below. With a goal of generating creative solutions that put children's environmental health first, attendees were asked not to allow potential fiscal constraints to limit their thinking.

- 1. The call to action:** There are scores of national organizations concerned about traditional "school health," but this effort is distinct from that, and should be known as "Environmental Health at School," as the panel and workshop are titled.
- 2. Develop a communication and advocacy strategy:** Advocacy organizations should coordinate a communication and advocacy strategy to demonstrate the urgent moral, ethical, cost savings, and legal imperatives to care for children where they learn and play and to integrate children's environmental health into public health and into education. The message should be that environmental health considerations must be prioritized when siting, designing, constructing, renovating, and maintaining educational facilities. In addition, educational personnel and officials should receive training in environmental health topics relevant to schools and child care facilities. To support these efforts, a national network of stakeholders should be created to engage champions in states and localities, leverage Congressional support through personal testimony, and develop white papers for the incoming presidential administration to encourage policy reform.
- 3. Implement necessary legislative and regulatory changes:** The federal government could develop minimum standards for protecting children's environmental health in schools and child care facilities. Simultaneously, advocates could explore mechanisms for adapting elements of NIOSH and OSHA programs that were established for worker health and safety to help set up an independent system to protect children in schools and in child care facilities. In addition, the CDC could strengthen the coordination of its programs to ensure that issues related to children's environmental health in schools and child care facilities are adequately addressed and prioritized. Changes in state policies may also be needed.
- 4. Healthy Children, Healthy Schools' reports:** High level reports could be commissioned to review existing information on children's environmental health in schools and child care facilities and provide recommendations on actions related to children's environmental health in schools. These reports could be done by a National Academies body or the President's Task Force on Environmental Health and Safety Risks to Children. Topics could include a review of the existing literature, a study of the scale of children's environmental health needs in schools and child care facilities, and identifying prevention and mitigation strategies for primary and secondary environmental health risks to children in these venues.



5. **Establish a National Healthy Children, Healthy Schools Commission:** Commission could be created and charged with following up on any recommendations developed as a results of special reports on key topics (as above), such as developing research, collecting and managing data, and posting the results of school assessments and registered complaints. The commission would be a public-private partnership and should include US EPA, CDC NCEH/ATSDR, CDC NIOSH, National Institute of Environmental Health Sciences (NIEHS), US Department of Education, nongovernmental organizations, and knowledgeable parents and community-based advocates.
6. **Responding to the Civil and Disability Rights challenges:** An analysis of how the Department of Education's Office for Civil Rights has handled environmental health issues in accommodation requests as well as a legal analysis of school and or state agency liability for children's environmental health at school should be addressed. Another report should analyze if and how federal disability laws and regulations could protect children impacted by environmental factors.
7. **Develop effective facility prevention programs across the country:** There could be a two-tiered approach to inspections. School districts could conduct maintenance, monitoring of identified risk factors, and inspections. To accomplish this, a committee of school nurses, facilities staff, and parents or an independent, state-licensed third party could conduct regular walk-throughs. A regulatory authority such as state or local health departments could conduct routine regulatory inspections to assess environmental health and safety conditions in schools and child care facilities. CDC's School Health Policy and Practice Survey (SHPPS) could be improved to collect and report national trends in PK-12 facility environment quality; it would need a significant expansion to address child care.
8. **Develop institutional tools or mechanisms for identifying at-risk children:** Tools or mechanisms could be developed to 1) ensure that at-risk children receive appropriate assistance and 2) improve the identification of those who are medically fragile. This includes using syndromic surveillance to receive chief complaints.
9. **Develop effective prevention and intervention systems for children across the country:** To establish effective intervention systems across the country, an independent program similar to the efforts of the NIOSH and OSHA models could be developed to cover children in their workplaces (i.e., schools/child care). In addition, the Pediatric Environmental Health Specialty Units (PEHSUs) and/or state health departments could receive complaints about environmental exposures at schools and child care facilities and work with state and local health departments to conduct onsite investigations. To expand and support an effective intervention program, state-specific handbooks of state regulations and the rights of disabled children could be developed as a desktop reference for addressing children's school-based risks and exposures.

**10. Conduct pilot studies of the proposed prevention, intervention, and tracking**

**programs:** Pilot studies for tracking and surveillance programs could be conducted by the Council of State and Territorial Epidemiologists (CSTE) and other entities.

**11. Establish training, education, and guidance programs for parents/guardians, teachers and principals, health care providers, and public health professionals:**

PEHSUs, federal agencies, educational unions or associations, local and state health departments, and ATSDR regional representatives could develop trainings that are tailored to each stakeholder group. Trainings should include general information about the kinds of environmental risks and exposures found in schools and specific concerns for sensitive populations, as well as guidance on 1) harmful practices that contribute to the persistence of environmental risks and exposures in schools, 2) how to recognize problems, 3) how to take an environmental health history, and 4) whom to contact in case of an emergency.

## **Appendix 1: Attendees**

<b>Organization</b>	<b>Name</b>
Advocates for Environmental Human Rights (New Orleans, Louisiana)	Monique Harden, JD, Co-Director & Attorney
Association of State and Territorial Health Officials (ASTHO)	Kerry Wyss, MEM, Director, Environmental Health Kathleen Dolan, MHS, Senior Analyst, Environmental Health
Centers for Disease Control and Prevention, National Center for Environmental Health (NCEH) and Agency for Toxic Substances and Disease Registry (ATSDR)	Bill Cibulas, PhD, MS, Acting Associate Director for Science & Senior Advisor for Public Health (designee for Patrick Breyse, Director)
Center for Effective Government	Ron White, MS, Director of Regulatory Policy
Children's Defense Fund	Kathleen King, Deputy Director of Child Health Policy
Children's Environmental Health Network (CEHN)	Nsedu Obot Witherspoon, MPH, Executive Director Kristie Trousdale, Program Manager
Consultant, formerly with Massachusetts Department of Public Health	Suzanne Condon, MSM
Council of State and Territorial Epidemiologists	Melissa Murray Jordan, MS, Senior Environmental Epidemiologist, Florida Department of Health
County of Los Angeles Department of Public Health	Angelo Bellomo, Deputy Director for Health Protection
Education Facilities Clearinghouse	G. Victor Hellman, Ed. D, Research Project Director
Environmental Law Institute	Tobie Bernstein, JD, Senior Attorney & Director of Indoor Environments & Green Buildings Program
Healthy Schools Campaign	Mark Bishop, Vice President of Policy
Healthy Schools Network	Claire Barnett, MBA, Executive Director
Indiana University School of Public Health	Lloyd Kolbe, PhD, Emeritus Professor of Applied Health Science
Lawrence Berkeley National Laboratory at University of California at Berkeley	William Fisk, MS, Senior Scientist & Leader of the Indoor Environment Group
Maryland Department of Health and Mental Hygiene	Clifford Mitchell, MD, Director, Environmental Health Bureau, Prevention and Health Promotion Administration
National Council on School Facilities, Board of Directors	Barbara Bice, Regional Board Member from Maryland
Mid-Atlantic Center for Children's Health and the Environment at Georgetown University (MACCHE)	Laura Anderko, PhD, RN, Director and Professor, Robert and Kathleen Scanlon Chair in Values Based Health Care, School of Nursing & Health Studies

National Association of City and County Health Officials (NACCHO)	Jennifer Li, MHS, Director for Environmental Health & Health & Disability
National Association of School Nurses	Donna Mazyck, MS, RN, NCSN, Executive Director Shirley Schantz, RN, Ed D, Director of Training
National Education Association (NEA) Healthy Schools Caucus	Chip Halverson, ND, Co-Founder and Member
National Institute for Occupational Safety and Health (NIOSH)	John Howard, MD, JD, MPH, Director
Natural Resources Defense Council	Erik Olson, Senior Strategic Director for Health & Food
Oklahoma Parent	Kim Voss
Pediatric Environmental Health Specialty Units Network and the American Academy of Pediatrics	Jerome Paulson, MD, Professor Emeritus of Pediatrics, School of Medicine & Health Sciences & Professor Emeritus of Environmental & Occupational Health, Schools of Public Health & Health Services
School-Based Health Alliance	Erin Ashe, Program Manager (designee for Andrea Shore, Director of Programs)
Tennessee Parent and Parents for School Safety	Daniela Kunz
Center for Cities + Schools at University of California Berkeley	Jeff Vincent, PhD, Deputy Director
US Environmental Protection Agency (EPA)	Ruth Etzel, MD, PhD, Director, Office of Children's Health Protection (OHCP) Khesha Reed, Associate Director, OCHP Brenda Doroski and Michele Curreri (designees for David Rowson, Director, Indoor Environments Division, Office of Radiation and Indoor Air)
<b>Funders</b>	
Grantmakers In Health	Colin Pekruhn, Program Director
W.K. Kellogg Foundation	Ellen Braff-Guajardo, Program Officer, Healthy Kids Team
<b>Facilitation Team</b>	
RESOLVE	Dana Goodson, Mediator Kim Rustem, Program Associate

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Consultant to Healthy Schools Network Jerome A. Paulson, MD

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